vention group. Anti-diarrheal and anti-microbial drugs were dispensed in over 90% of the encounters, sometimes with ORS. Slight improvement in knowledge was seen on some aspects after training. However, while ORS-only was dispensed in fewer than 10% of encounters, around 20% of interviewees indicated they would dispense only ORS for such case.
CONCLUSIONS: Despite slight improvement of knowledge on some aspects of case management after training, the program failed to improve practice. Better knowledge does not necessarily lead to better practice.

PHP13

THE ROLE OF VARIOUS FACTORS IN THE DRUG FORMULARY DECISION-MAKING PROCESS

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The formulary decision-making (FDM) process involves many factors that must be considered in order to determine whether a specific drug product should be placed on a formulary. Still, the frequency of use, and the need for more information of the factors used in FDM is unknown at this time.
OBJECTIVES: The objectives of this study were to identify: (1) which outcome measures, pharmacoeconomic methodologies, and sources of information are used in the FDM process, and (2) areas in which formulary decision-makers require more information.
METHODS: A mail survey, based on the literature and two focus groups held with pharmacists involved in FDM, was developed in the summer of 2000. The final survey was mailed to 40 registrants to a FDM conference (before the conference was held) and to 25 other pharmacists involved in FDM in Atlantic Canada. Respondents were asked to rate their organization's use and their personal need for more information of 27 different factors, tools, and techniques. Data analysis was performed using SumQuest Survey Software, v. 7.0. and JMP, v. 3.2.1.
RESULTS: Thirty-nine of the 64 (60.9%) useable surveys were completed and returned. Out of 14 outcome measures considered, relative efficacy of the drugs was identified as being the most frequently used, while quality-adjusted life years was identified as being the least frequently used. Cost-effectiveness analysis was identified as being the most commonly used pharmacoeconomic technique, while cost-consequence analysis was identified as being the least frequently used. Cost-consequence analysis was identified by the respondents as being their single greatest learning need.
CONCLUSIONS: Traditional outcome measures such as relative efficacy and cost of the drug still appear to be the main factors used in FDM in Atlantic Canada. The findings have provided an insight into the FDM process and have identified topics for future continuing education events.

PHP14

IMPACT OF MULTI-TIERED PHARMACY BENEFITS ON PATIENT ATTITUDES AND BEHAVIOR

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In response to increasing prescription costs, managed care plans are adopting multi-tiered plans that shift medication costs to the consumer.
OBJECTIVE: To examine the impact of 2 and 3 tiered plans on patient attitudes and behavior of individuals with chronic diseases.
METHODS: Quasi-experimental pre-post with comparison group design was used for a sample with hypertension, dylipidemia, arthritis, GERD or diabetes. General attitudes about formulary medications, factors affecting the decision to switch to formulary medications and the willingness-to-pay for non-formulary medications were obtained from a mail survey administered in the pre period. Intervention group included members whose employer converted from a 2-tier to a 3-tier benefit (n = 5,711). Comparison groups included members whose employer remained in a 2-tier (n = 715) or 3-tier benefit (n = 1,707). Maximum likelihood estimates from a repeated measures model were used to examine changes in formulary compliance controlling for demographics, health status, diseases, plan type and attitudes. Formulary compliance rate (pre- versus post- intervention).
RESULTS: Formulary compliance showed a negligible increase over time in individuals whose plans did not change. Intervention group experienced a 5.6% increase in formulary compliance rate ($p < .0001$). However their baseline rates were 13% lower than their counterparts in 2-tier plans. Attitudinal measures had no effect on formulary compliance rates. Individuals over 65 years and those under 25 years were respectively 4.0% and 7.5% more formulary compliant than those between 25–64 years. Differences existed by disease state: diabetics were 6.9% more compliant, while arthritics (2.8%), hypertensives (2.5%), and members with GERD (6.3%) were less formulary compliant.
CONCLUSIONS: 3 tier plans can improve formulary compliance rates of individuals with chronic diseases. Patient attitudes had no impact on formulary compliance. Future research should investigate how 3-tier benefits influence medical resource utilization.